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34026	7590	03/18/2004	EXAMINER	
JONES DAY 555 WEST FIFTH STREET, SUITE 4600 LOS ANGELES, CA 90013-1025			NASSER, ROBERT L	
			ART UNIT	PAPER NUMBER
			3736	
DATE MAILED: 03/18/2004				

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 12

Application Number: 10/014,977  
Filing Date: December 10, 2001  
Appellant(s): WEBBER, MICHAEL EVAN

**MAILED**  
**MAR 17 2004**  
**GROUP 3700**

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Coe Bloomberg  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 5, 2004.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

The rejection of claims 1, 4, 5, 6, 8-11, 13, 14, 17-22, 24-26, 29-34, 36, 37, and 39-42 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

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3830630	Kiefer et al	8-1974
5376555	Forrester et al	12-1994
5445160	Culver et al	8-1995
6192261	Gratton et al	2-2001
6038913	Gustafsson et al	3-2000

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

The rejection under 35 U.S.C. 112, first paragraph has been withdrawn.

Claims 1, 4-6, 8, 10, 11, 13, 14, 17, and 19 are rejected under 435 U.S.C. 103(a) as being obvious over Kiefer et al in view of Forrester et al and Culver et al. With respect to claims 1, 4-6, 8, 10, 11, 13, 14, 17 and 19, Kiefer teaches method of analyzing alveolar breath by expiring breath into a chamber, continuously monitoring the concentration of carbon dioxide in the expired breath with a detector 17, and when the carbon dioxide level reaches 4.5%, triggering the measurement of alcohol concentration in the alveolar breath. Neither the carbon dioxide nor the alcohol measurements are done optically. Forrester et al further teaches a similar measuring arrangement using the carbon dioxide concentration to trigger the measurement of alcohol concentration, where both the carbon dioxide and alcohol levels are done optically. Hence, it would have been obvious to modify Kiefer et al to use optical measurements, as it is merely the substitution of one known equivalent sensing method for another. The combination does not base the trigger threshold on previous measurements. Culver et al teaches a breath monitoring device where a threshold is update based on previous patient

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measurements, to tune the device to the particular patient. Hence, it would have been obvious to modify the above combination to update the threshold based on previous measurements, in order to allow the device to be fine tuned to each patient.

Claims 20, 21, 22, 24-26, 29, 31-34, 36, 37, 39, 40, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiefer et al in view of Forester et al and Culver et al as applied to claims 1, 4-6, 8, 10, 11, 13, 14, 17, and 19 above, and further in view of Gratton et al. With regard to claims 20, 21, 22, 24-26, 29, 31-34, 36, 37, 39, 40, and 42, the only remaining difference is that applicant recites that the two light signals are multiplexed. Gratton et al teaches in figure 4, that which is well known in this field, i.e. that it is known to multiplex signals of different wavelengths for measurement. Hence, it would have been obvious to modify the above combination to multiplex the signals, as it is the substitution of one equivalent measurement technique for another.

Claims 1, 4-6, 8, 9, 11, 13, 14, 17, and 18 are rejected under 35 U.S.C. 103(a) as being obvious over Gustafsson et al et al in view of Kiefer, Forrester et al and Culver et al. With respect to claims 1, 4-6, 8, 9, 11, 13, 14, 17 and 18, Gustafsson teaches a method of measuring NO in alveolar air using spectrophotometric techniques. It does not teach a method of ensuring that only alveolar breath components are measured. Kiefer teaches method of analyzing alveolar breath by expiring breath into a chamber, continuously monitoring the concentration of carbon dioxide in the expired breath with a detector 17, and when the carbon dioxide level reaches 4.5%, triggering the measurement of alcohol concentration in the alveolar breath. The carbon dioxide

measurement is not done optically. Forrester et al further teaches a similar measuring arrangement using the carbon dioxide concentration to trigger the measurement of alcohol concentration, where the carbon dioxide levels are measured optically. Hence, it would have been obvious to modify Kiefer et al to use optical measurements, as it is merely the substitution of one known equivalent sensing method for another. The combination does not base the trigger threshold on previous measurements. Culver et al teaches a breath monitoring device where a threshold is update based on previous patient measurements, to tune the device to the particular patient. Hence, it would have been obvious to modify the above combination to update the threshold based on previous measurements, in order to allow the device to be fine tuned to each patient.

Claims 20, 21, 22, 24-26, 29, 30, 32-34, 36, 37, 39, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gustafsson et al in view of Kiefer et al and Forester et al and Culver et al as applied to claims 1, 4-6, 8, 9, 11, 13, 14, 17, and 18 above, and further in view of Gratton et al. With regard to claims 20, 21, 22, 24-26, 29, 30, 32-34, 36, 37, 39, 40, and 41, the only remaining difference is that applicant recites that the two light signals are multiplexed. Gratton et al teaches in figure 4, that which is well known in this field, i.e. that it is known to multiplex signals of different wavelengths for measurement. Hence, it would have been obvious to modify the above combination to multiplex the signals, as it is the substitution of one equivalent measurement technique for another.

**(11) Response to Argument**

The examiner again notes that the rejection under 35 U.S.C. 112, first paragraph has been withdrawn.

On pages 6 and 7 of the brief appellant points out the deficiencies of the references individually and the number of reference used to reject some of the claims. These arguments have nothing to do with the issue presented by applicant, and as such, will not be treated by the examiner.

This appeal turns on a single issue, as noted by appellant on pages 7 and 8 of appellant's brief, whether or not it is obvious to modify the Kiefer/Forrester combination to use a variable threshold. All of the rejections stand or fall on this issue.

Appellant has asserted that there is no suggestion to make the Kiefer/Forrester/Culver combination. The examiner notes that the suggestion need not be explicit in the reference. In the present case, Culver is selected as a teaching of what is well known in the medical field, i.e. it is well known to adjust the thresholds based on the specific patient's measurements to tune the measuring device to the patient. As such, it is the examiner's position to update the threshold based on previous measurements, to allow the device to more accurately correspond the individual user's physiology.

Appellant has further noted on page 8 that Kiefer teaches away from having adjustable thresholds because it has a fixed resistor that establishes the threshold. The examiner first notes Kiefer nowhere discusses that a variable threshold is undesirable or that it wouldn't work its invention. As discussed in MPEP 2123, giving an

example or an embodiment is not a teaching away. It is therefore the examiner's position that Kiefer does not teach away from the combination.

Appellant has further asserted that modifying Kiefer as proposed would render Kiefer inoperative. Appellant is correct in noting that Kiefer does use a fixed threshold. However, the examiner disagrees the modification would render Kiefer inoperative. Culver teaches the desirability of using a variable threshold. Kiefer is further patented in 1974. Twenty seven years later, at the time of applicant's filing, computers were commonly used in combination with sensors to analyze data and were capable of adjusting the threshold of a monitoring system base don previous measurements. It is the examiner's position therefore, that it was well within the ability of one skilled in the art to modify Kiefer to use an adjustable threshold.

Appellant has further asserted that the examiner has relied on hindsight. It is the examiner's position that no impermissible hindsight has been used.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Primary Examiner  
Art Unit 3736

RLN  
March 5, 2004

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